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09/589,391	06/07/2000	Thaddeus John Gabara	1298/0F379	9139

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MENDELSON AND ASSOCIATES PC
1515 MARKET STREET
SUITE 715
PHILADELPHIA, PA 19102

EXAMINER

FAULK, DEVONA E

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/589,391

Applicant(s)

GABARA ET AL.

Examiner

Devona E. Faulk

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7-11 and 13-56 is/are pending in the application.
- 4a) Of the above claim(s) 5, 6 and 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-11, 13-27, 36-48 is/are rejected.
- 7) ☒ Claim(s) 28-35 and 49-56 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-3,8-10,17,19-23,26,27,36,40,44,47 and 48 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-3,7-9,13-17,19-23,24,27,45 and 48** are rejected under 35 U.S.C. 103(a) as being unpatentable over Platt (U.S. Patent 5,226,086) in view of Bisgaard (U.S. Patent 6,741,712).

Claims 1, 8, 19-23,44 share common elements.

Regarding **claims 1,8,19,20-23, and 44** Platt discloses a method, apparatus, system and interface unit for programming a hearing aid comprising a hearing health professional at a remote location transmitting the audiogram information to a central office at another location (column 1, lines 8-14) (See Figure 1), which reads on "generating a command via a first computer at a first location"; communicating the information via the interface unit (20) or separately through the same communications medium (18), (column 9, lines 16-18) which reads on "transmitting the command to a second computer at a second location over a remote data link". Preferably the communication medium (18) is a conventional telephone system (column 9, line 50); transmitting through the computer (26) at the central office via modem (24),

Art Unit: 2644

communication medium (18) and modem (22) the set of auditory characteristics back to the remote location through interface unit (20) which is couple to hearing aid (30), the hearing aid comprising a DSP (See Figure 1), which reads on "sending the command from the second computer to a digital signal processor in one of a telephone and the hearing aid". Platt teaches of remotely adjusting a hearing aid. Although Platt teaches on the above elements, he fails to teach on using a telephone to remotely adjust a hearing aid. However, the concept of using a telephone to remotely adjust a hearing aid was well known in the art at the time of filing as taught by Bisgaard. Bisgaard discloses using a telephone to remotely transfer signals to a hearing aid, where the user telephones the audiologist and while the hearing aid is close to the telephone (column 2, line 61-column 3, line 4). Although, Bisgaard does not teach specifically of outputting a test tone from the DSP as claimed, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Platt's method of programming a hearing aid by using Bisgaard's concept of using a telephone to send control signals and obvious to have a response to the control signals so that the audiologist can determine the user's hearing ability.

Claim 2 claims the method of claim 1 wherein said command is a DTMF tone. DTMF or dual tone multi-frequency tones, also known as Touch Tone is used for telephone signaling over the line in the voice frequency band to the call-switching center. Today DTMF is used for most call setup to the telephone exchange, at least in the Western world. Touch-tone is common with conventional and cellular phones. Furthermore, Bisgaard discloses using a telephone to send control signals. Thus it is obvious that DTMF would be used as the method of telephone signaling.

Claim 5 claims the method claim 1 wherein said adjusting step comprises the steps of transmitting the user response to the first computer over the remote data link, retrieving a stored audiogram from memory based on the accuracy of the response, and uploading the audiogram into the hearing aid of the user over the remote data link. As stated above apropos of claim 1, the combination of Platt and Bisgaard meet all elements of that claim. Therefore the combination is shown to meet all elements of claim 5 with the exception of the above claimed elements. Platt teaches that the auditory characteristics received by interface unit (20) are then stored into memory of the hearing aid to complete the programming process (column 10, lines 10-13). All elements of claim 5 are comprehended by claim 1. Therefore claim 5 is rejected for reasons stated above apropos of claim 1.

Claim 7 claims the method of claim 1 wherein said adjusting step further comprises determining an accuracy of the user response. As stated above apropos of claim 1, the combination of Platt and Bisgaard meet all elements of that claim. Therefore the combination is shown to meet all elements of claim 7 with the exception of the above claimed elements. Determining an accuracy of the user response is obvious to do in order to accurately adjust the hearing.. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use Rho's and Basseas combined system for the benefit of the capability of producing a hearing aid better fitted for the individual.

Claim 9 claims the method of claim 8 wherein said command is a DTMF tone. DTMF or dual tone multi-frequency tones, also known as Touch Tone is used for telephone signaling over the line in the voice frequency band to the call-switching center. Today DTMF is used for most call setup to the telephone exchange, at least in the Western world. Touch-tone is common with

Art Unit: 2644

conventional and cellular phones. Furthermore, Bisgaard discloses using a telephone to send control signals. Thus it is obvious that DTMF would be used as the method of telephone signaling.

Claim 13 claims the method of claim 8, wherein said audiogram is a compensation curve for adjusting performance characteristics of the hearing aid based on the user response. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use an audiogram to adjust the performance characteristics as claimed for the benefit of more accurately adjusting the hearing aid. An audiogram is defined as a graphic record of hearing ability for various sound frequencies that is used to measure hearing loss. Audiometric data reads on audiogram.

Claim 14 claims the method of claim 8, wherein the command is generated by a first computer at a first location and is received by a second computer at a second location, and said second computer sends the command to the digital processor. Platt teaches the concept of a first and second computer. Bisgaard teaches of using a phone to adjust a hearing aid. It would have been obvious to one of ordinary skill in the art at the time of the invention to have a second computer as claimed for the a benefit of quickly adjusting a hearing aid.

Claim 15 claims the method of claim 14 wherein the response is stored in the first computer. Platt teaches the concept of a first and second computer. A computer has a memory and it would be obvious to store the response in order to have a record of the data. Thus all elements of claim 15 are comprehended by claim 8. Therefore, claim 15 is rejected for reasons stated above apropos of claim 8.

Claim 16 claims the method of claim 14 wherein the response is stored in the second computer. Platt teaches the concept of a first and second computer. A computer has a memory and it would be obvious to store the response in order to have a record of the data.. Thus all elements of claim 16 are comprehended by claim 14. Therefore, claim 14 is rejected for reasons stated above apropos of claim 14.

Claim 17 claims the method of claim 14 wherein the response is stored in the first and second computer. Platt teaches the concept of a first and second computer. A computer has a memory and it would be obvious to store the response in order to have a record of the data.. Thus all elements of claim 16 are comprehended by claim 14. Therefore, claim 14 is rejected for reasons stated above apropos of claim 14.

Claim 24 claims the invention of claim 23, wherein the processor is in the telephone and the telephone generates each test tone. As stated above apropos of claim 24, the combination of Platt and Bisgaard meet all elements of claim 24, therefore the combination meets all elements of claim 26 with the exception of the claimed matter. Bisgaard teaches of a phone that transmits control signals to a hearing aid. All elements of claim 24 are comprehended by claim 23. Therefore, claim 24 is rejected for reasons stated above apropos of claim 23.

Claim 27 claims the invention of claim 24, wherein the computer system transmits the commands to the processor in the telephone using DTMF signaling. As stated above apropos of claim 24, the combination of Platt and Bisgaard meet all elements of claim 24, therefore the combination meets all elements of claim 26 with the exception of the claimed matter. DTMF or dual tone multi-frequency tones, also known as Touch Tone is used for telephone signaling over the line in the voice frequency band to the call-switching center. Today DTMF is used for

Art Unit: 2644

most call setup to the telephone exchange, at least in the Western world. Touch-tone is common with conventional and cellular phones. Furthermore, Bisgaard discloses using a telephone to send control signals. Thus it is obvious that DTMF would be used as the method of telephone signaling.

Claim 45 claims the invention of claim 44, wherein the processor is in the telephone and the telephone generates each test tone. As stated above apropos of claim 24, the combination of Platt and Bisgaard meet all elements of claim 24, therefore the combination meets all elements of claim 26 with the exception of the claimed matter. Bisgaard teaches of a phone that transmits control signals to a hearing aid. All elements of claim 45 are comprehended by claim 44. Therefore, claim 45 is rejected for reasons stated above apropos of claim 44.

Claim 48 claims the invention of claim 45, wherein the computer system transmits the commands to the processor in the telephone using DTMF signaling. DTMF or dual tone multi-frequency tones, also known as Touch Tone is used for telephone signaling over the line in the voice frequency band to the call-switching center. Today DTMF is used for most call setup to the telephone exchange, at least in the Western world. Touch-tone is common with conventional and cellular phones. Furthermore, Bisgaard discloses using a telephone to send control signals. Thus it is obvious that DTMF would be used as the method of telephone signaling.

4. **Claims 10,19,26 and 47** are rejected under 35 U.S.C. 103(a) as being unpatentable over Platt (U.S. Patent 5,226,086) in view of Bisgaard (U.S. Patent 6,741,712) in further view of Hou (U.S. Patent 6,522,988).

Claim 10 claims the method of claim 8, wherein said receiving step comprises inputting a response to the output command into the computer via a keyboard attached to the computer.

Art Unit: 2644

As stated above apropos of claim 8, the combination of Platt and Bisgaard meet all elements of that claim. Therefore the combination is shown to meet all elements of claim 10 with the exception of the claimed matter. Huo discloses on-line hearing examination and evaluation with capability of adjusting a hearing aid remotely (column 11, lines 6-25). Huo teaches testing a person's hearing over the phone where the user uses the telephone keypad to send a respond to the computer. He further discloses that a user's response can be enter, at a local machine, through a wide range of input devices (column 8, lines 3-15). He indicates the user of a mouse and a GUI as one input method. This implies that the local machine is a computer. It is obvious that a keyboard can be the entry method. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use Hou's concept of entering a user's response as claimed in order to determine a user's response.

Regarding **claim 19**, Huo discloses on-line hearing examination and evaluation with capability of adjusting a hearing aid remotely (column 11, lines 6-25). He further discloses that a user's response can be enter, at a local machine, through a wide range of input devices (column 8, lines 3-15). He indicates the user of a mouse and a GUI as one input method. This implies that the local machine is a computer. It is obvious that a keyboard can be the entry method. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use Hou's concept of entering a user's response as claimed in order to determine a user's response.

Claim 26 claims the invention of claim 24, wherein the user enters each response via a keyboard attached to the computer system. As stated above apropos of claim 24, the combination of Platt and Bisgaard meet all elements of claim 24, therefore the combination

Art Unit: 2644

meets all elements of claim 26 with the exception of the claimed matter. Huo teaches testing a person's hearing. He further discloses that a user's response can be enter, at a local machine, through a wide range of input devices (column 8, lines 3-15). He indicates the user of a mouse and a GUI as one input method. This implies that the local machine is a computer. It is obvious that a keyboard can be the entry method. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use Hou's concept of entering a user's response as claimed in order to determine a user's response.

Claim 47 claims the invention of claim 45, wherein the user enters each response via a keyboard attached to the computer system. As stated above apropos of claim 24, the combination of Platt and Bisgaard meet all elements of claim 24, therefore the combination meets all elements of claim 26 with the exception of the claimed matter. Huo teaches testing a person's hearing over the phone where the user uses the telephone keypad to send a respond to the computer. He further discloses that a user's response can be enter, at a local machine, through a wide range of input devices (column 8, lines 3-15). He indicates the user of a mouse and a GUI as one input method. This implies that the local machine is a computer. It is obvious that a keyboard can be the entry method. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use Hou's concept of entering a user's response as claimed in order to determine a user's response.

5. **Claims 4,11,25,38,43 and 46** are rejected under 35 U.S.C. 103(a) as being unpatentable over Platt (U.S. Patent 5,226,086) in view of Bisgaard (U.S. Patent 6,741,712) in further view of Rho (U.S. Patent 6,086,541).

Claim 4 claims the method of claim 1 wherein said receiving step comprises inputting a response to the command via a keypad on the telephone. As stated above apropos of claim 1, the combination of Platt and Bisgaard meet all elements of that claim. Therefore the combination is shown to meet all elements of claim 4 with the exception of inputting a response to the command via a keypad on the telephone. Rho teaches that a user uses the telephone keypad to send a respond to the computer. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use Rho's concept of entering a user's response as claimed in order to determine a user response.

Claim 11 claims the method of claim 8, wherein said receiving step comprises inputting a response to the output command into the computer via a keyboard attached to the computer. As stated above apropos of claim 8, the combination of Platt and Bisgaard meet all elements of that claim. Therefore the combination is shown to meet all elements of claim 10 with the exception of the claimed matter. Rho teaches that a user uses the telephone keypad to send a respond to the computer. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use Rho's concept of entering a user's response as claimed in order to determine a user response.

Claim 25 claims the invention of claim 24, wherein the user enters each response via a keypad on the telephone and the telephone transmits the user's responses to the computer system. As stated above apropos of claim 24, the combination of Platt and Bisgaard meet all elements of claim 24, therefore the combination meets all elements of claim 26 with the exception of the claimed matter. Rho teaches that a user uses the telephone keypad to send a respond to the computer. Thus it would have been obvious to one of ordinary skill in the art at

Art Unit: 2644

the time of the invention to use Rho's concept of entering a user's response as claimed in order to determine a user response.

Claim 43 claims the invention of claim 40, wherein the telephone is further adapted to receive each response from the user via a keypad on the telephone and transmit the user's responses to the computer system. As stated apropos of claim 40, the combination of Platt and Bisgaard meet all elements of claim 40, therefore the combination meets all elements of claim 43 with the exception of the claimed matter. Rho teaches that a user uses the telephone keypad to send a respond to the computer. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use Rho's concept of entering a user's response as claimed in order to determine a user response.

Claim 46 claims the invention of claim 45, wherein the user enters each response via a keypad on the telephone and the telephone transmits the user's responses to the computer system. As stated above apropos of claim 45, the combination of Platt and Bisgaard meet all elements of claim 24, therefore the combination meets all elements of claim 26 with the exception of the claimed matter. Rho teaches that a user uses the telephone keypad to send a respond to the computer. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use Rho's concept of entering a user's response as claimed in order to determine a user response.

6. **Claim 18** is rejected under 35 U.S.C. 103(a) as being unpatentable over Platt (U.S. Patent 5,226,086) in view of Bisgaard (U.S. Patent 6,741,712) in further view of Westermann (U.S. Patent 6,549,633).

Claim 18 claims the method of claim 8, wherein the digital signal processor is located in the hearing aid and step of sending the command to a digital signal processor is by a wireless link. As stated above apropos of claim 8, the combination of Platt and Bisgaard meets all elements of that claim. Therefore, the combination meets all elements of claim 18 with the exception of the claimed matter. Watermann discloses a communication link (7) to a hearing aid that can be a wireless link (column 4, lines 63-65). Thus it would have been obvious to use Watermann's concept of sending a command to a digital signal processor by a wireless link in order to advantageously effect a user's operability.

7. **Claims 36-42** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rho (U.S. Patent 6,086,541) in view of Bisgaard (U.S. Patent 6,741,712).

Regarding **claim 40**, Rho discloses a method for testing hearing ability by using an automatic voice response system run by a computer comprising a computer (that includes the program) and a telephone. The user would call, the program is logged into, and the test program proceeds to execute a test (column 2, lines 35-column 5). The testing would begin and the user indicates, through the # button, whether a sound has been heard. The test proceeds until completed. This method reads on "receive a sequence of one or more non-audible commands from a computer system", "cause an audible test tone to be generated by the telephone in response to receipt of each command", "the computer system receivers a response to each of one or more of the test tones from the user". Although Rho teaches on the above elements, he fails to teach of a hearing aid present during the testing and that the computer system processes the one or more responses from the user to generate parameters for controlling the operations of the hearing aid and the computer system transmitting the parameters to the hearing aid to adjust the

Art Unit: 2644

operations of the hearing aid. However, the concept of a computer system processing one or more responses for controlling a hearing aid and a computer system that transmits the parameters of the hearing aid as claimed were well known in the art at the time of filing as taught by Bisgaard. Bisgaard discloses using a telephone to remotely transfer signals to a hearing aid, where the user telephones the audiologist and while the hearing aid is close to the telephone (column 2, line 61-column 3, line 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use Bisgaard concept of having a hearing aid that receives control signals in order to remotely adjust a hearing aid.

Claim 37 claims the invention of claim 36, wherein processor receives the command sequence and the parameters from the computer system via a telephone. As stated apropos of claim 36, the combination of Rho and Bisgaard meet all elements of claim 36, therefore the combination meets all elements of claim 37 with the exception of the claimed matter. Bisgaard teaches of hearing aid that receives control signals from a computer through a telephone. Rho teaches that a user uses the telephone keypad to send a respond to the computer. All elements fo claim 37 are comprehended by claim 36. Therefore, claim 37 is rejected for reasons given above apropos of claim 36.

Claim 38 claims the invention of claim 36, wherein processor receives the command sequence and the parameters from the computer system via a telephone. As stated apropos of claim 36, the combination of Rho and Bisgaard meet all elements of claim 36, therefore the combination meets all elements of claim 38 with the exception of the claimed matter. Rho teaches that a user uses the telephone keypad to send a respond to the computer. Thus it would

Art Unit: 2644

have been obvious to one of ordinary skill in the art at the time of the invention to use Rho's concept of entering a user's response as claimed in order to determine a user response.

All elements of **claim 39** are comprehended by claim 38. DTMF or dual tone multi-frequency tones, also known as Touch Tone is used for telephone signaling over the line in the voice frequency band to the call-switching center. Today DTMF is used for most call setup to the telephone exchange, at least in the Western world. Touch-tone is common with conventional and cellular phones. Furthermore, Bisgaard discloses using a telephone to send control signals. Thus it is obvious that DTMF would be used as the method of telephone signaling.

All elements of **claims 41 and 42** are comprehended by claim 40. DTMF or dual tone multi-frequency tones, also known as Touch Tone is used for telephone signaling over the line in the voice frequency band to the call-switching center. Today DTMF is used for most call setup to the telephone exchange, at least in the Western world. Touch-tone is common with conventional and cellular phones. Furthermore, Bisgaard discloses using a telephone to send control signals. Thus it is obvious that DTMF would be used as the method of telephone signaling.

Claim Objections

8. **Claims 28-35, 49-56** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2644


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devona E. Faulk whose telephone number is 703-305-4359. The examiner can normally be reached on 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on 703-305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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FORESTER W. ISEN
SUPERVISORY PATENT EXAMINER